July 11, 1961 W. L. PIESCHEL 2,992,054

COMBINATION OF COMBINED BARS AND COOLERS

Filed Sept. 9, 1958 2 Sheets-Sheet 1

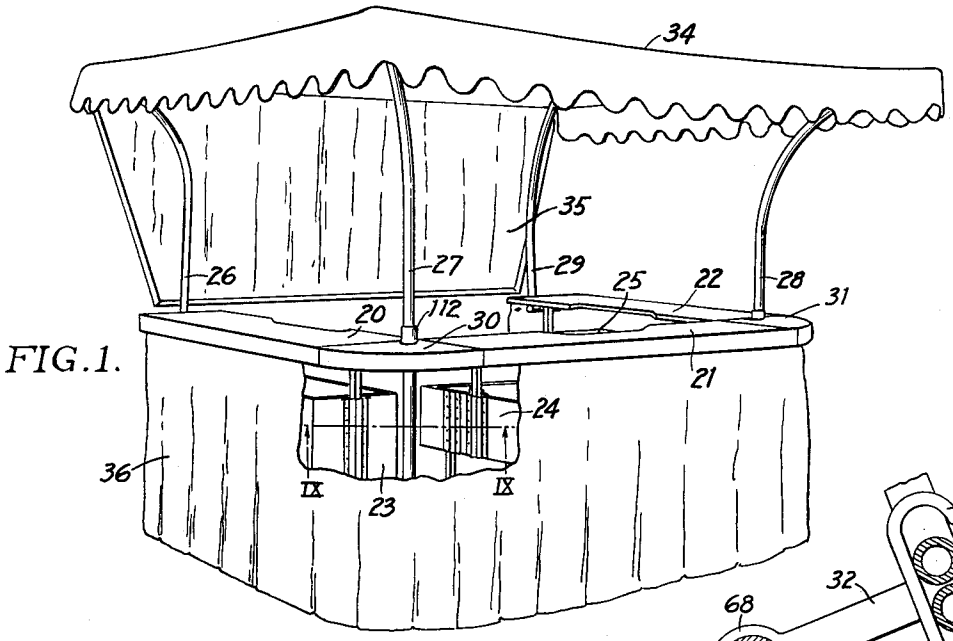


FIG. 1.

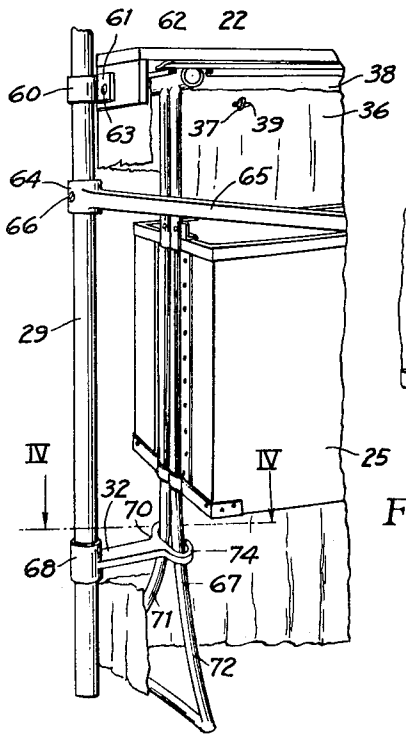


FIG. 2.

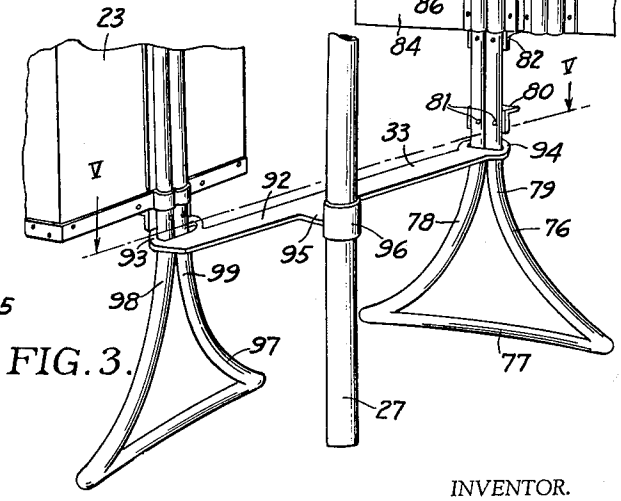


FIG. 3.

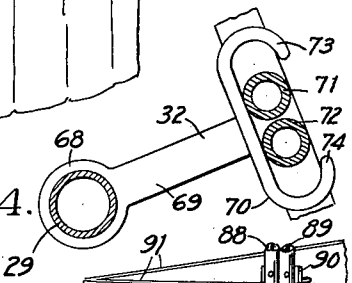


FIG. 4.

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COMBINATION OF COMBINED BARS AND COOLERS

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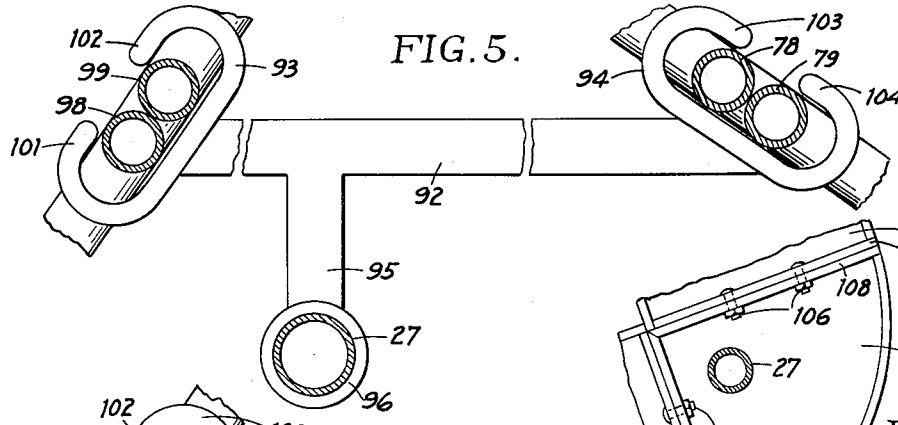


FIG. 5.

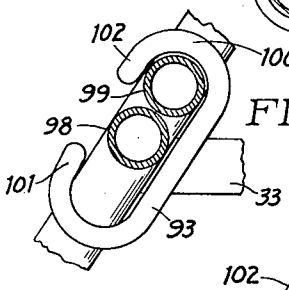


FIG. 6.

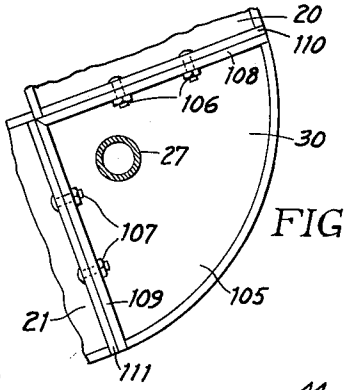


FIG. 9.

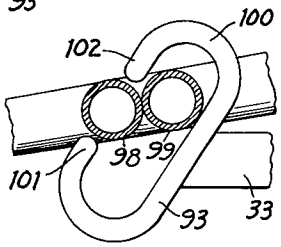


FIG. 7.

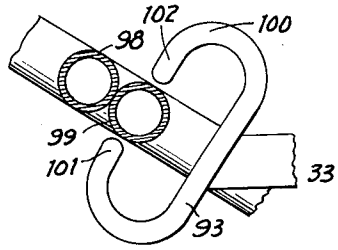


FIG. 8.

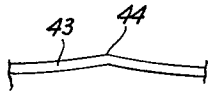


FIG. 13.

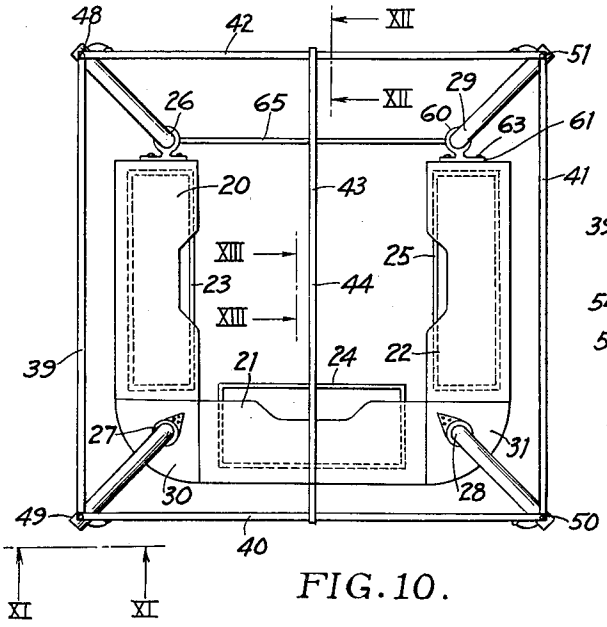


FIG. 10.

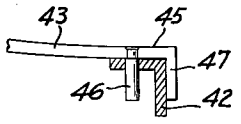


FIG. 12.

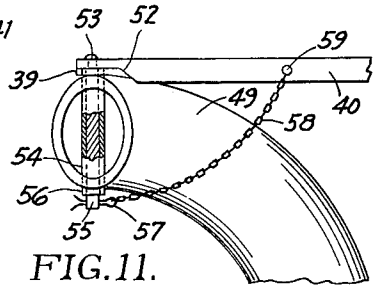


FIG. 11.

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2,992,054

COMBINATION OF COMBINED BARS AND COOLERS

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Filed Sept. 9, 1958, Ser. No. 759,993
4 Claims. (Cl. 312—111)

This invention relates to construction of combined bars and coolers and the like for dispensing refrigerator beverages or the like.

An object of this invention is to provide a combination of a multiple number of combined bars and coolers which can be readily transported in knocked-down or folded condition and which can be quickly and easily assembled and disassembled.

A further object of this invention is to provide coupling means between each of a plurality of said combined bars and coolers which permits quick and easy assembly and disassembly of the combination of the combined bars and coolers and which rigidly connects individual units together.

A further object of this invention is to provide a portable light-weight enclosure in which the combined bars and coolers are connected and strongly held together by coupling means and to an overhead assembly above said bars and coolers, thus producing an attractive dispensing unit in appearance, while rendering protection to the combined bars and coolers.

A further object of this invention is to provide a plurality of coupling means holding together a plurality of combined bars and coolers in which the coolers can be of various sizes and shapes.

A still further object of this invention is to provide a plurality of coupling means for the bars and coolers which will permit a plurality of combined bars and coolers such that the general configuration thereof may be of a square, a pentagon, hexagon, or of any other kind of regular or irregular polygon.

The above and other objects and features of this invention will be apparent to those skilled in the art to which this invention pertains, from the following detailed description, and the drawings, in which:

FIGURE 1 is a view in perspective of an enclosure unit of combined bars and coolers and overhead assembly constructed in accordance with an embodiment of this invention, with a bar hanging curtain partly broken away in front for clarity;

FIG. 2 is a fragmentary view in perspective of a coupling means as applied to an open side of a combined bar and cooler, a curtain which forms a part of the enclosure unit being partly broken away for clarity;

FIG. 3 is a fragmentary view in perspective of a coupling means as applied to two adjacent combined bars and coolers;

FIG. 4 is a plan view partly in section of the coupling means illustrated in FIG. 2, taken along line IV—IV in FIG. 2;

FIG. 5 is a plan view of the coupling means illustrated in FIG. 3, taken along line V—V in FIG. 3;

FIG. 6 is a fragmentary view partly in section showing a part of the coupling means and leg portions illustrated in FIG. 5, with coupling means in raised position ready for swinging to released position;

FIG. 7 is a fragmentary view in section, similar to FIG. 6, with one of the leg portions partly swinging to released position;

FIG. 8 is a fragmentary view partly in section similar to FIGS. 6 and 7, showing the leg portions at the moment of freeing;

FIG. 9 is a plan view taken on the line IX—IX in FIG. 1;

FIG. 10 is a plan view of the unit with the canopy removed;

FIG. 11 is an elevational view, partly broken away, of part of the overhead assembly, looking in the direction of arrows XI—XI of FIG. 10;

FIG. 12 is an elevational view partly section taken on the line XII—XII of FIG. 10; and

FIG. 13 is a fragmentary view looking in the direction of the arrows XIII—XIII of FIG. 10.

In the following detailed description, and the drawings, like reference characters indicate like parts.

FIGS. 1 through 3 show a combination of combined bars and coolers with an overhead assembly therewith which is constructed in accordance with an embodiment of this invention. The bars **20**, **21** and **22** and their respective cooler receptacles **23**, **24**, and **25** are united together into one combination unit by the use of upright props **26**, **27**, **28**, and **29**, spandrel bars **30** and **31**, and linking or coupling means such as illustrated by **32** and **33** in FIGS. 2 and 3, respectively, as will be more fully described hereinafter. The corners of a canopy **34** are measured to fit upon the modified upper ends of the upright props **26**, **27**, **28** and **29**, among other elements of the overhead assembly, with a back curtain **35** hanging from or made integral with it. A lower bar hanging curtain **36**, shown here to be single-pieced, hangs beneath and within the framework of the bars **20**, **21**, **22**, **30** and **31** from suitable means such as rotatable buttons or hooks **37** of the type shown in FIG. 2, as fastened to the inner side of a front vertical flange **38** which constitutes part of the bar **22**. Elongated slots **39** (only one of which is shown) are provided in curtain **36** through which each button or hook **37** passes and thence is rotated to secure curtain **36** to the bar framework or flange **38**. The canopy **34** and the curtains **35** and **36** provide an attractive appearance to the viewer of the combination of combined bars and coolers.

As shown in FIGS. 10, 11, 12, and 13, the weight and displacement of the canopy **34** is carried and distributed by angle-shaped support rods **39**, **40**, **41**, **42**, an inverted rib or strip **43** with each half thereof sloping from its center **44** as in an inverted V towards rods **40** and **42**, and the modified ends of upright props **26**, **27**, **28**, **29** which extend thereto. Sloping downwardly from its center point **44**, particularly shown by FIGS. 12 and 13, the connection of rib **43** to rods **40** and **42** is accomplished, as illustrated by FIG. 12 with respect to rod **42**. An end portion **45** of rib **43** engages angle-shaped rod **42**. A pin **46** mounted on the rib **43** extends through an aperture in the horizontally-displaced flange of rod **42** while an outer clamp finger **47** engages the exterior side of the vertically-displaced flange of rod **42**.

The ends of horizontally-displaced angle-shaped support rods **39**, **40**, **41**, and **42**, are mounted upon the top portion of the modified ends of the upright props **26**, **27**, **28**, and **29**. The props are made of strong, light-weight aluminum tubular piping. The props are arcuately fashioned towards their respective upper ends **48**, **49**, **50**, **51**, as illustrated in FIGS. 1 and 10, so as to produce a substantially horizontal portion on both the top and bottom areas of these respective upper ends, as illustrated by FIG. 11 with respect to end **49**. Mounted upon said top portion of each of these ends, as illustrated by FIG. 11 with respect to end **49**, are the ends of flanged rods **39** and **40**. A portion of the vertically displaced flange of rod **40** is cut away at **52** to provide adequate clearance of the rod **40** with prop end **49** and with the other rod **39** in order for proper engagement therewith, as similarly done at all the ends of rods **39**, **40**, **41**, **42**. An upright

pin 53, preferably cylindrical, is attached to the rod 40 at each of its ends, one end of which is shown in FIG. 11. A sleeve 54, preferably cylindrical, of greater length than the outside diameter of prop 49, is mounted with the rod 39 at each of its ends, one end of which is shown in FIG. 11. Both pin 53 and sleeve 54 extend perpendicularly from their respective flanged rods. Apertures appear in the substantially flat horizontal portions of the top and bottom areas of tubular prop end 49 and are diametrically opposed to each other therein. Thus, in connecting the flanged rods 39 and 40 to the prop end 49 in this part of the overhead assembly, the sleeve 54 is inserted completely through the diametrically-opposed apertures of prop end 49, the pin 53 is thence inserted through sleeve 54 with its end 55 extending and exposed below the end 56 of sleeve 54. A cotter key or pin 57 is the means provided to secure pin 53 to sleeve 54 and modified prop end 49 upon assembly of the overhead elements. Cotter key or pin 57 may be held by a chain 58 to flanged rod 40 by means of rivet 59 for retaining purposes. Thus, by such connection and attachment, the overhead assembly is mounted and attached to provide a suitable base for the use of canopy 34.

The other ends of the vertical props 26, 27, 28, 29, constitute ground or base supporting means to hold together the combined bars and coolers with the aid of coupling means 32 and 33. As shown in FIG. 2, prop 29 extends through an aligning sleeve 60 attached to the bar 22. The sleeve is freely movable on and encircles prop 29 and has integral therewith a plate 61 extending along and parallel to the length of a depending flange 62 which is flush with the table portion end of and which constitutes part of bar 22. Plate 61 is held rigidly to flange 62 by suitable means such as screws 63 inserted through plate 61 into depending flange 62. Beneath aligning sleeve 60 is another sleeve 64, which is mounted upon an end of spanner rod 65 and which encircles prop 29, with a similar sleeve (not shown) mounted on the other end of spanner rod 65 adapted to encircle prop 26. Spanner rod 65 spans the rear opening of the enclosure, the height of which is determined by the particular engagement of set screw 66 against prop 29 through sleeve 64 and a second set screw (not shown) against prop 26 through the sleeve (not shown) encircling prop 26.

Near the bottom of prop 29, coupling means 32 extends from said prop to a vertical support or leg 67 of the combined bar and cooler. The specific construction of the combined bar and cooler may be found in my copending application, "Combined Bar and Cooler," Serial No. 734,297. The coupling 32, as shown in FIG. 4, comprises a holding sleeve 68 which is fitted to freely move on and encircle prop 29, an arm 69 integrally extending from said sleeve 68 and sufficient in length to be connected to a jaw 70. The jaw 70 is adapted to gird upright leg portions 71 and 72 of the vertical support or leg 67, which supports one end of the cooler receptacle 25. The leg portions 71 and 72 are arcuate and diverge downwardly as shown in FIG. 2. While holding sleeve 68 encircles prop 29 and is freely movable thereon, jaw 70 encompasses diverging leg portions 71 and 72 at a point of relatively close physical proximity of said leg portions to each other, thereby causing jaw 70 to gird the leg portions simultaneously through the opening formed by jaw grippers 73 and 74. Upon such girding by jaw 70, coupling means 32 is adapted to shift downwardly along the length of prop 29, thereby causing jaw grippers 73 and 74 to engage the diverging inside faces of leg portions 71 and 72 at a point of relatively remote physical proximity of said leg portions to each other, producing a tight seizure of the diverging leg portions 71 and 72 to jaw 70. Such engagement, illustrated in FIG. 4, produces a snug, sturdy fit of coupling means 32 to the combined bar 22 and cooler 25 and vertical prop 29. It is to be noted that prop 29 is now properly aligned with respect to the said combined bar and cooler in preparation for assembly of the overhead assembly elements heretofore described. To free jaw 70 from leg portions 71 and 72, coupling means 32 is shifted upwardly along the length of prop 29. That part of prop 29 below aligning sleeve 60 is capable of being swung away from cooler 25 and leg member 67 because of free play existing in aligning sleeve 60, thereby resulting in the jaw 70 either being released or detached from or encompassing leg portions 71 and 72.

An interlocking, connecting and supporting relationship between the two immediately adjacent cooler receptacles is provided by a coupling means 33. As viewed in FIG. 3, the coolers may be of the single type described in my application Serial Number 734,297, supra, or one of same may be used in conjunction with a cooler of the type shown by cooler 24. Rather than being of relatively narrow and deep construction as is cooler 23, cooler 24 is of wide and shallow construction. It is supported by legs at each of its ends, as illustrated by leg 76 at one end, and is formed from a length of suitably strong tubing bent to substantially an inverted T-shape. The ground or base cross member 77 of leg 76 is adapted to rest on the ground with upright end or diverging leg portions 78 and 79 integrally mounted on each end thereof. The upright diverging leg portions 78, 79 may be held in engagement by any suitable means, such as an angle iron 80 riveted or bolted thereto by means of rivets or bolts 81. Angle iron 80 may also be used to support a cooler of dimension shown by cooler 23. An angle-shaped support member 82 is riveted, bolted, or otherwise fastened to the inside faces of members 78, 79 above angle iron 80 and is in engagement with the bottom of cooler 24. Leg portions 78, 79 continue to extend above support member 82 and into an elongated sleeve fixture 83, which is rigidly attached to the exterior side 84 of cooler receptacle 24 by suitable means such as screws 85 passing through flange 86 of fixture 83 into the side 84. Thus, the extent to which the leg portions 78, 79 extend into sleeve fixture 83 is determined by the position of support member 82 while the position of support member 82 effects a particular height for the cooler receptacle 24.

In order that the bar-hanging curtain 36 may hang clear from the wide receptacle 24 by means of bar 21, offset to sleeve fixture 83 and towards the curtain hanging portion of the bar as viewed in FIGS. 1 and 3 is a second elongated sleeve fixture 87 identical in construction and mounted in the same manner upon side or wall 84 as is fixture 83. Into fixture 87 descend leg portions 88 and 89 which in turn support bar 21 in the same fashion and by the same construction as is embodied in my patent application noted, supra. The extent to which leg portions 88, 89 descend into fixture 87 is determined by the relative position of angle iron support 90 mounted upon the inside faces of leg portions 88, 89, in a similar fashion of mounting as support member 82 is mounted on the inside faces of leg portions 78, 79. The bottom surfaces of angle iron support 90 rests over and upon the horizontal flanged surface 91 of cooler receptacle 24. Thus, the height of bar 21 is determined by such relative position of angle iron support 90 on leg portions 88, 89, though support 90 is in constant engagement with flanged surface 91. Such height preferably corresponds with the height of bars 20 and 22.

Coupling means 33, viewed in FIGS. 3 and 5, is adapted to coact with each of said combined bars of coolers and comprises a T-shaped tie or cross bar 92, jaws 93 and 94, each of which is at one of the ends of the head of the T, an extension arm 95 constituting the trunk of the T, and a retaining sleeve member 96 integrally abutting and coincident with the free end of the trunk portion, said retaining sleeve member 96 being adapted to freely move upon and encircle vertical prop 27, thereby effect-

ing, also, corresponding movement of jaws **93** and **94**. In other words, upon relative rotation occurring between retaining sleeve member **96** and vertical prop **27**, the jaws revolve about vertical prop **27**. Upon retaining sleeve member **96** reciprocating upon vertical prop **27**, said jaws **93** and **94** move upwardly and downwardly in a similar manner. Upward movement permits an expeditious encompassing of the respective leg portions by the respective jaw grippers **101**, **102** and **103**, **104**, on jaws **93**, **94**, the opening between which being of such size that only one leg portion will pass through the opening at any one time. To illustrate, diverging leg portions **98** and **99** of cooler **23** are first encompassed by the grippers of jaw **93** while the cross-bar in its entirety has been shifted to an upward position in which said diverging leg portions **98** and **99** are at a point of relatively close proximity. Similarly, diverging leg portions **78** and **79** of cooler **24** at a point of relatively close proximity, are encompassed by the grippers of jaw **94**. Upon the jaws of the coupling means having encompassed their respective leg portions, the cross-bar is moved or shifted downwardly, to produce a tight seizure of the respective diverging leg portions by the respective grippers of their respective jaws.

FIGS. 6 through 8 illustrate the operation by which the coupling means **33** is relatively detached or released from and, in reverse, relatively connected to the diverging leg portions of cooler receptacles in combination with each other, as well as with the bars and the overhead assembly heretofore described. Firstly, the coupling means **33** is moved or shifted to its upward position at which the leg portions are in engagement whereby jaw grippers **93** and **94** may encircle their respective leg portions **98**, **99** and **78**, **79**. Leg portions **98**, **99** of the cooler **23**, are positioned towards a corner **100** of jaw **93** by thrusting that part of the cooler thereto if not already in such position. At this point, cooler **23** to which members **98**, **99** are secured is pivoted generally about the jaw **93**, as a result of which leg portion **98** rotates through the jaw opening formed by the two opposing grippers **101** and **102** of jaw **93** (FIG. 7). Leg portion **99** is carried along behind leg portion **98** through said opening which is sufficiently large to allow but one leg portion to pass through at any one time. Thus, in FIG. 8, the leg portions **98**, **99** may be moved clear of jaw **93**. A similar operation may be carried out with respect to leg portions **78**, **79**, and jaw **94**. Hence the detachment of a combined bar and cooler from another may be accomplished. To unite the combination of combined bars and coolers, the reverse operation is effected.

Spandrel bars, such as **30** and **31**, may be linked to the bars **20**, **21**, **22** to add a continuous appearance thereto. For illustrative purposes, FIG. 9 shows spandrel bar **30** which comprises a generally triangularly-shaped flat board portion **105**, which is flush with the top of bars **20** and **21**, and is held thereto by means of bolts and nuts **106** and **107**, respectively, passing through depending flanges **108** and **109** of spandrel bar **30** and the depending end flanges **110** and **111** of bars **20** and **21**. The upright prop **27** extends through spandrel **30** and is held conveniently thereto by means of bar bracket **112** (FIG. 1) screwed thereto. Thus, upright props **27** and **28** are properly aligned with reference to the overhead assembly heretofore described, by such means as coupling means **33** and spandrel bar **30**.

It is to be noted that the physical embodiment of this invention illustrated in the drawings, represents but a rectangular configuration of the combined bars and coolers. However, the invention is not limited to a rectangular configuration, but may include a configuration of any regular or irregular polygon, i.e., of equal or unequal sides. Therefore, an important characteristic of this invention is the angle established at the intersection of a line of extension from the minor axes of each of the jaws of coupling means **33**. For a rectangular configuration,

heretofore described, such angle is 90°. For a polygon of, say, five equal sides, the necessary angle would be 108°; etc. Such angles for regular polygons may be measured directly, or computed from the mathematical formula:

$$X° = \frac{N-2}{N}$$

straight angles, wherein N represents the number of sides in the polygon, and X is said angle to be determined. Thus, in a regular polygon of 5 sides,

$$X° = \frac{5-2}{5} \times 180$$

or 108°. In the case of irregular polygons, such an angle would best be measured directly from a scale model of the enclosure configuration, i.e., the angle between adjacent coolers. The exact dimensions of spandrel bar **30**, the cross bar **92** of coupling means **33**, and the trunk of said T-shaped coupling means would vary, in length and in size, without departing from the scope of this invention. It follows that said trunk or extension arm **95** need not be fixed at right angles, as shown in FIG. 5, to cross bar **92** for application of this invention to a particular physical embodiment.

Having described my invention, what I claim as new, and desire to secure by Letters Patent is:

1. In combination, a pair of elongated receptacles, vertical supports at ends of the receptacles for supporting said receptacles, an upright prop adjacent to and spaced from adjacent ends of the receptacles, each of said supports having downwardly diverging leg portions, and a linking member which comprises a sleeve mounted on the prop for up and down movement thereon, and a cross bar attached to said sleeve and having jaws mounted on the ends thereof, each jaw receiving and releasably holding the downwardly diverging leg portions of one of said supports.

2. A portable knockdown bar enclosure comprising a plurality of bar units, an upright prop associated with each of two adjacent units of said bar units by being located between the adjacent ends of the said two adjacent units of said bar units, each of said bar units having vertical supports at each of said units ends, each of said supports comprising upper portions and lower portions, said lower portions diverging downwardly from the upper portions, and a coupling means rigidly connecting and strongly holding together each two adjacent units of said bar units whereby the enclosure is of a rigid and strong construction, said coupling means comprising a cross bar having a retaining sleeve member mounted thereon, said sleeve member mounted on said upright prop for up and down movement thereon, and a jaw on each end of said cross bar, each jaw receiving and releasably girding the diverging lower portions of each of the vertical supports adjacent to the upright prop, whereby said bar units and upright prop are linked securely together.

3. In a portable knockdown enclosure comprising a plurality of combination bars and coolers and an upright prop associated with each adjacent two of said combination bars and coolers by being located between the adjacent ends of said adjacent two of said combination bars and coolers, each of said combination bars and coolers having a vertical support at each of its ends, the lower portions of each of said supports diverging downwardly thereof, a coupling means rigidly connecting and strongly holding together each of said adjacent combination bars and coolers whereby the enclosure is of a rigid and strong construction, said coupling means comprising a cross bar, a retaining sleeve mounted on an extension arm thereof and encircling said prop, said sleeve adapted to rotate and reciprocate upon the upright prop, and a jaw mounted on each end of said cross bar, each jaw tightly seizing the diverging lower portions of a support adjacent to said upright prop whereby the adjacent combination bars and

coolers and said upright prop are connected and securely held together.

4. In combination with a portable knockdown bar enclosure having vertical supports, coupling means securely holding together the portable knockdown bar enclosure thereby resulting in said enclosure being of a rigid and strong construction, said means comprising a cross bar, a retaining sleeve member mounted on an extension arm thereof for rotational and reciprocating cooperation with an upright prop, said cross bar having a pair of jaws each of which is mounted at an end thereof and each of which is adapted to tightly gird downwardly diverging portions of one of the vertical supports adjacent the upright prop, whereby each of said jaws securely girds the diverging portions of a vertical support of one of said bar units adjacent the upright prop.

References Cited in the file of this patent

UNITED STATES PATENTS

904,253	Forster	Nov. 17, 1908
985,309	Van Vorce	Feb. 28, 1911
1,798,810	Rice	Mar. 31, 1931
2,836,860	Staropoli	June 3, 1958
2,867,853	Lindgren	Jan. 13, 1959